

REMARKS

Applicant hereby responds to the Office Action of Jan. 18, 2005, in the above-referenced patent application. Before this Amendment, Claims 1-20 were pending in the above-referenced patent application. Through this Amendment, Claims 21-32 have been added, such that Claims 1-32 are now pending in the patent application. No new matter has been added.

Information Disclosure Statement

The Examiner's objection to the IDS is acknowledged. Applicant is currently working on obtaining the necessary explanation of relevance of the cited documents and will forward said explanation as soon as it is acquired.

Specification

The specification has herein been amended so that the Brief Summary of the Invention complies with 37 CFR 1.73. The specification has further herein been amended to correct typographical errors and other informalities raised by the Examiner.

Drawings

The drawings were objected to various inconsistencies between the specification and the drawings. The drawings and the specification have been amended to overcome the objections. Figs. 3, 4, and 8 have been amended to responsively meet the Examiner's objections. Three

replacement drawings sheets including corrected Figs. 3, 4 and 8 are attached, along with three marked-up sheets indicating the corrections for the convenience of the Examiner.

In Fig. 3, reference character "301" has been corrected to "310". In Fig. 4, reference character "429" has been added, reference character "417" has been added and reference character "430" has been corrected. In Fig. 8, reference character "800" has been added.

The specification has been amended to include reference character "450". The specification has been further amended to overcome the Examiner's objections to reference characters "428", "528" and "628".

Claim Objections

Claim 11 was objected to because of the phrase "the agreement" lacking prior antecedent basis. Claim 11 was amended to depend on Claim 10 to overcome the prior antecedent basis objection. Claim 11 was further objected to because it should refer to "end users". Claim 11 has been accordingly amended to overcome this objection.

Claim 16 was objected to because the phrases "the signal reflective of the regular program" and "the signal reflective of the Banner Information" lack prior antecedent basis. Claim 16 has been amended to overcome this objection.

Claim Rejections

Claims 16-20 were rejected under 35 USC 112, second paragraph, as being indefinite.

Claims 16-19 have been amended to clarify the claimed limitations, wherein the combined signal includes regular programming and a Background Commercial, and the Background Commercial in turn includes Banner Information (i.e., Background Commercial Banner Information). As such, it is respectfully submitted that the objections under 35 USC 112 should be withdrawn.

Claims 1, 9, 12 and 16 were rejected under 35 USC 102(e) as being anticipated by US Pub. No. 2002/0007493 by Butler et al (“Butler”). Claims 2-8, 13-15 and 17-20 were rejected under 35 USC 103(a) as being unpatentable over Butler in view of the specification. Claims 10 and 11 were rejected under 35 USC 103(a) as being unpatentable over Butler.

Claim Rejections under 35 USC 102(e)

Rejection of Claims 1, 9, 12 and 16 under 35 USC 102(e) as being anticipated by Butler is respectfully traversed because Butler does not disclose all of the claimed limitations.

Butler is directed to a video broadcast system including a broadcast source that broadcasts a video stream and provides accompanying supplemental data files. Each supplemental data file is an HTML file having instructions for rendering a hyperlink overlay on the video stream (Abstract).

By contrast, according to **Claim 1**, a digital video service network comprises: means for providing a combined digital signal, the combined digital signal having information reflective of

a regular program signal and a Banner Information signal; a receiver for receiving the combined digital signal and a presentation unit for displaying the combined digital signal, the Banner Information being presented to the presentation unit with the regular program; a controller that controls the presentation unit to display the Banner Information with the regular program upon end user permission only.

Further, the Banner Information herein is different from the hyperlink overlays in Butler. A hyperlink is simply links to other pages, requiring a user to click on the link to access the other pages for information. However, the Banner Information herein is defined as contents in the forms of texts, graphics, images, or, any other type of audio visual information which is intended for commercial advertisement and can be presented to the user with any other type of digital television presentation.

Further, according to Butler, a receiver is configured to receive the video stream and accompanying supplemental data files and to display the hyperlink overlays in conjunction with the video stream. The receiving equipment is configured to render video only in display areas that are set to the color key value. Thus, the video stream is rendered "behind" the hyperlink overlays, and the backgrounds of the overlays appears transparent (Abstract).

In contrast to the claimed invention, there is no controller in Butler that allows a user to disable display of hyperlink overlays. However, according to Claim 1, a controller controls the

presentation unit to display the Banner Information with the regular program upon end user permission only. For at least these reasons rejection of Claim 1, and all claims dependent therefrom should be withdrawn.

Claim 9 was rejected for substantially the same reasons as Claim 1, and is therefore allowable for at least the reasons provided in relation to Claim 1. Further, as claimed herein, the combined signal (including the regular program and the Banner information) is transmitted over the channel. By contrast, as the Examiner also states, in Butler the video stream is transmitted to the receiver first, and subsequently the HTML files are transmitted. For at least these reasons rejection of Claim 9, and all claims dependent therefrom should be withdrawn.

Regarding **Claim 12** it is respectfully submitted that for at least the above reasons Butler does not disclose a receiver device that specifically enables the simultaneous display of the Banner Information and the regular programming on the presentation unit. Further, Butler is directed to generic personal computers for displaying video with hyperlink overlays in a computing environment where the user clicks on the hyperlinks for access to information. By contrast, according to the present invention, a receiver has specialized components therein for receiving a combined signal of a regular program and banner information, to display both simultaneously according to end user permission. The receivers herein are patentably distinct from the general purpose personal computers utilized by Butler.

Regarding **Claim 16**, it is respectfully submitted that Butler does not disclose a combined signal including a regular program and a Background Commercial, wherein the Background Commercial includes Background Commercial Banner Information as claimed. According to the present invention, Background Commercials are commercial advertisement programs which require a user's permission, or, request in order for them to access and be presented at the user's presentation unit. Conversely, if there is no permission or request from a user, then Background Commercials will not be presented at the user's presentation unit. Thus, unless the user desires to receive the Background Commercials, then the user will not be bothered by any Background Commercials while watching regular programs. Background Commercials, as defined herein, differ from typical commercial advertisements because a typical commercial advertisement is located between or in the middle of regular non-commercial programs. Whereas, Background Commercials can be available anytime, even when a regular program is displaying, i.e., the Background Commercials are carried in the background of the regular non-commercial.

Background Commercial Banner Information is information descriptive and/or related to the Background Commercials. Background Commercial Banner Information takes the form of text, graphics, and images which are associated with the content of the Background Commercials. Alternatively, Audio-Visual Information of a Background Commercials is the audio and video contents of the Background Commercials similar to typical commercial within regular TV programs. Hence, Background Commercials can have Background Commercial Banner Information and/or Audio-Visual Information.

Clearly, Butler does not disclose Background Commercials, Background Commercial Banner Information, or any disclosure remotely close to such claimed limitation. Further, Butler does not disclose a receiver for an interactive digital video service network, the receiver comprising: means for receiving a combined digital signal, the combined digital signal having information reflective of a regular program and a Background Commercial including Banner Information; means for decoding the combined digital signal and providing a first signal reflective of the regular program and a second signal reflective of the Background Commercial; means for receiving the second signal reflective of the Background Commercial and providing a signal reflective of the Banner Information of the Background Commercial; and means for providing a video output signal, the means for providing the video output signal combining information from the first signal reflective of the regular program and the signal reflective of the Banner Information of the Background Commercial, as required by Claim 16. For at least these reasons rejection of Claim 16, and all claims dependent therefrom should be withdrawn.

Claim Rejections under 35 USC 103(a)

Rejection of Claims 2-8, 13-15 and 17-20 under 35 USC 103(a) as being unpatentable over Butler in view of the specification is respectfully traversed because at least for the following reasons no prima facie case of obviousness has been established.

Regarding **Claim 2**, as discussed Butler does not disclose all of the limitations of base

Claim 1. Further, as the Examiner also states Butler does not disclose a TS Packetized combined signal. In addition, the information on page 17, lines 18-20 of the specification (relied on by the Examiner) is a general reference to MPEG-2 standard. As such, teaching of TS packetized combined digital signal for a regular program and Banner Information is disclosed by the present invention. There is no suggestion or motivation in Butler to utilize TS packetized combined digital signal for a regular program and Banner Information as claimed herein. It is well settled that in order for a modification or combination of the prior art to be valid, the prior art itself must suggest the modification or combination, "...invention cannot be found obvious unless there was some explicit teaching or suggestion in the art to motivate one of ordinary skill to combine elements so as to create the same invention." *Winner International Royalty Corp. v. Wang*, No. 96-2107, 48 USPQ.2d 1139, 1140 (D.C.D.C. 1998) (emphasis added). "The prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modifications needed to arrive at the claimed compound." *In re Jones*, 958 F.2d 347, 21 USPQ.2d 1941, 1944 (Fed. Cir. 1992) (emphasis added).

Even if the modification was legally justified, it still would not render Applicants' claimed invention obvious. The Patent Office admits that Butler does not teach all limitations in Claim 2. Therefore, the Patent Office attempts to modify Butler in order to teach Applicant's claimed invention. However, as discussed, there is no teaching in Butler of the claimed limitations. What the Patent Office call the "details associated with the implementation", are not trivial or obvious. It is respectfully submitted that such an argument by the Patent Office does not

met its burden of establishing a prima facie case of obviousness. The effort required to combine the teachings of Butler and MPEG-2 standard to combine a regular program and Banner Information as TS packetized combined digital as claimed would require a substantial undertaking and numerous elements which would not be obvious. The general reference to MPEG-2 in Butler in conjunction with MPEG-2 standard definition is not a disclosure of the claimed limitations. Indeed, there is no teaching or suggestion in Butler that a TZ packetized signal can even be used. The Patent Office is improperly using “hindsight” and the teachings of Applicant’s own claimed invention in order to combine references to render Applicant’s claims obvious. The Office Action admits that Butler fails to teach all of the limitations of Applicant’s claimed invention. However, the Office Action improperly attempts to modify Butler in an attempt to achieve Applicant’s claimed invention. For at least these reasons, rejection of Claim 2 should be withdrawn.

Regarding **Claim 3**, as discussed Butler does not disclose of base Claim 1. Further, as the Examiner also states, Butler does not disclose that: the means for providing a combined digital signal further comprises a first coding unit for coding the regular program signal and a second coding unit for coding the Banner Information signal, a first TS packetization unit for receiving the coded regular program signal and providing a packetized bit stream reflecting the coded regular program signal and a second TS packetization unit for receiving the coded Banner Information signal and providing a packetized bit stream reflecting the coded Banner Information signal, a TS Packet multiplexer for receiving the packetized regular program signal and the

packetized Banner Information signal and providing a multiplexed transport stream, and a channel modulation unit for modulating the transport stream into the combined digital signal and sending the combined digital signal for transmission to the channel, as required by Claim 3.

In addition, the information on page 3, lines 4-10 of the specification (relied on by the Examiner) is a general reference to MPEG-2 standard. As such, teaching of Claim 3 is disclosed by the present invention. There is no suggestion or motivation in Butler to utilize such teachings for TS packetized combined digital signal of a regular program and Banner Information as claimed herein.

Even if the modification was legally justified, it still would not render Applicants' claimed invention obvious. The Patent Office admits that Butler does not teach all limitations in Claim 3. Therefore, the Patent Office attempts to modify Butler in order to teach Applicant's claimed invention. However, as discussed, there is no teaching in Butler of the claimed limitations. What the Patent Office call the "details associated with the implementation", are not trivial or obvious. It is respectfully submitted that such an argument by the Patent Office does not met its burden of establishing a prima facie case of obviousness. The effort required to combine the teachings of Butler and MPEG-2 standard to combine a regular program and Banner Information as TS packetized combined digital as claimed in Claim 3 would require a substantial undertaking and numerous elements which would not be obvious. The general reference to MPEG-2 in Butler in conjunction with MPEG-2 standard definition is not a disclosure of the

claimed limitations. Indeed, there is no teaching or suggestion in Butler that a TZ packetized signal as in Claim 3 can even be used. The Patent Office is improperly using “hindsight” and the teachings of Applicant’s own claimed invention in order to combine references to render Applicant’s claims obvious. The Office Action admits that Butler fails to teach all of the limitations of Applicant’s claimed invention. However, the Office Action improperly attempts to modify Butler in an attempt to achieve Applicant’s claimed invention.

Similarly, regarding the limitation of a channel modulation unit for modulating the transport stream into the combined digital signal and sending the combined digital signal for transmission to the channel (required by Claim 3), there is no such disclosure in Butler. A “modulation” function of any sort is not even discussed or mentioned in Butler. It is respectfully submitted that the Examiner is improperly reading limitations into Butler that are not there. There is no modulation disclosure in para. [0013] or [0032] of Butler, as claimed herein. For at least these reasons, rejection of Claim 3 should be withdrawn.

Claim 15 was rejected for similar reasons as rejection of Claim 3. As such, it is respectfully submitted that rejection of Claim 15 should be withdrawn for at least the reasons provided above in relation to Claims 3, and 9.

Claims 4-7, 13, 14 and 17-20 were rejected essentially based on elements 60, 66 and 68 of Butler. Rejection of these claims is respectfully traversed because as discussed Butler does

not disclose limitations of base claims 1, 9 and 16. Further, in the Office Action the Examiner has simply referred to tuner 60 of Butler, without specific reference to relevant description in Butler, and has summarily interpreted tuner 60 to disclose several of the claimed limitations herein (i.e., a channel demodulation unit, a TS demultiplexer unit, etc.). This is without pointing to disclosure in Butler that states that the tuner 60 discloses such claimed limitations. The Examiner has generally referred to paragraphs [0032] - [0039] of Butler, without any clear statement where in such paragraphs each specific limitation is disclosed. It is respectfully submitted that no such limitations are disclosed in Butler regarding element 60 or any other element. If the Examiner believes otherwise, Applicant respectfully requests that the Examiner specifically point to such description in Butler. The Patent Office has not met its burden of showing where such claimed limitations are disclosed in Butler.

Again, in the Office Action the Examiner has simply referred to video subsystem 66 of Butler, without specific reference to relevant description in Butler, and has summarily interpreted element 66 to disclose several of the claimed limitations herein (i.e., a Banner Information TS depacketizer, a Rendering Unit, a video reconstruction unit, Audio/video decoders, etc.). This is without pointing to disclosure in Butler that states that the element 66 discloses such claimed limitations. The Examiner has generally referred to paragraphs [0032] - [0039] of Butler, without any clear statement as to where in such paragraphs each specific limitation is disclosed. It is respectfully submitted that no such limitations are disclosed in Butler regarding element 66 or any other element. If the Examiner believes otherwise, Applicant respectfully requests that the

Examiner specifically point to such description in Butler. The Patent Office has not met its burden of showing where such claimed limitations are disclosed in Butler.

In addition, regarding Butler and the above MPEG-2 standard, there is no suggestion or motivation in Butler to utilize such teachings for TS packetized combined digital signal of a regular program and Banner Information as claimed herein. Even if the modification was legally justified, it still would not render Applicants' claimed invention obvious. The Patent Office admits that Butler does not teach all limitations of the claims. Therefore, the Patent Office attempts to modify Butler in order to teach Applicant's claimed invention. However, as discussed, there is no teaching in Butler of the claimed limitations. What the Patent Office call the details associated with the implementation without specific reference to Butler as discussed, are not trivial or obvious. It is respectfully submitted that such an argument by the Patent Office does not met its burden of establishing a prima facie case of obviousness. The effort required to combine the teachings of Butler and MPEG-2 standard to combine a regular program and Banner Information as TS packetized combined digital as claimed would require a substantial undertaking and numerous elements which would not be obvious. The general reference to MPEG-2 in Butler in conjunction with MPEG-2 standard definition is not a disclosure of the claimed limitations. Indeed, there is no teaching or suggestion in Butler that a TZ packetized signal as claimed can even be used. The Patent Office is improperly using "hindsight" and the teachings of Applicant's own claimed invention in order to combine references to render Applicant's claims obvious. The Office Action admits that Butler fails to teach all of the

limitations of Applicant's claimed invention. However, the Office Action improperly attempts to modify Butler in an attempt to achieve Applicant's claimed invention. For at least these reasons, rejection of claims 4-7, 13, 14 and 17-20, should be withdrawn.

Claim 8 was rejected for essentially the same reasons as rejection of Claims 1, 3 and 4, and as such Claim 8 is allowable for at least the reasons provided above in relation to Claims 1, 3 and 4.

Rejection of Claims 10 and 11 under 35 USC 103(a) as being unpatentable over Butler is respectfully traversed because the Examiner has not established a prima facie case of obviousness. As discussed, Butler does not disclose all of the limitations of base Claim 9. Further, as the Examiner also states, Butler does not disclose the claimed limitations. Further, Applicant respectfully submits that the Examiner in taking official notice is improperly using "hindsight" and the teachings of Applicant's own claimed invention in order to combine references to render Applicant's claims obvious. The Examiner admits that the Butler fails to teach all of the limitations of Applicant's claimed invention. However, the improperly attempts to modify Butler in an attempt to achieve Applicant's claimed invention. There is no suggestion or motivation to modify Butler for entering into an agreement with end users which allows for the simultaneous display of the Banner Information and the regular programming on the presentation unit (Claim 10). Nor is there any suggestion or motivation to modify Butler wherein the agreement provides for a limitation on the subscription charged to the end users (Claim 11).

There is no user control in Butler over the hyperlink overlays as claimed.


There is no reason for Butler's users to enter into an agreement for hyperlink overlays since the hyperlink overlays do not interrupt the video stream of Butler as commercial do. By contrast, since a typical commercial does interrupt video programming, according to claimed invention user agreements are utilized to provide uninterrupted programs wherein user has control over how those commercials are viewed (e.g., Banner Information). This is not even necessary in Butler since the hyperlinks are simply an added feature, not a solution to otherwise interrupted regular programming. For at least these reasons, rejection of Claims 10 and 11 should be withdrawn.

New Claims

New Claims 21-24 cover the case where the Background Commercial further includes Audi-Visual Information in addition to said Banner information, for display and user viewing. New Claims 25-32 covers end user permissions and viewing habits regarding Banner Information. Such limitations are supported by the specification, and are not taught or suggested by the cited references for at least the reasons provided above.

Conclusion

For these, and other, reasons, Applicants believe that the claims are in condition for allowance. Reconsideration, re-examination, and allowance of all claims are respectfully requested.

<p align="center">CERTIFICATE OF MAILING</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on</p> <p align="center">April 14 2005.</p> <p>By Sarah Nielsen</p> <p> _____ Signature</p> <p>April 14 2005</p>
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Respectfully submitted,



Kenneth L. Sherman

4/14/05

(Date)

Registration No. 33,783

Myers Dawes Andras & Sherman, LLP

19900 MacArthur Blvd., 11th Floor

Irvine, CA 92612

(949) 223-9600

(949) 223-9610 – Fax

Customer No.: 23386

Annotated Sheet

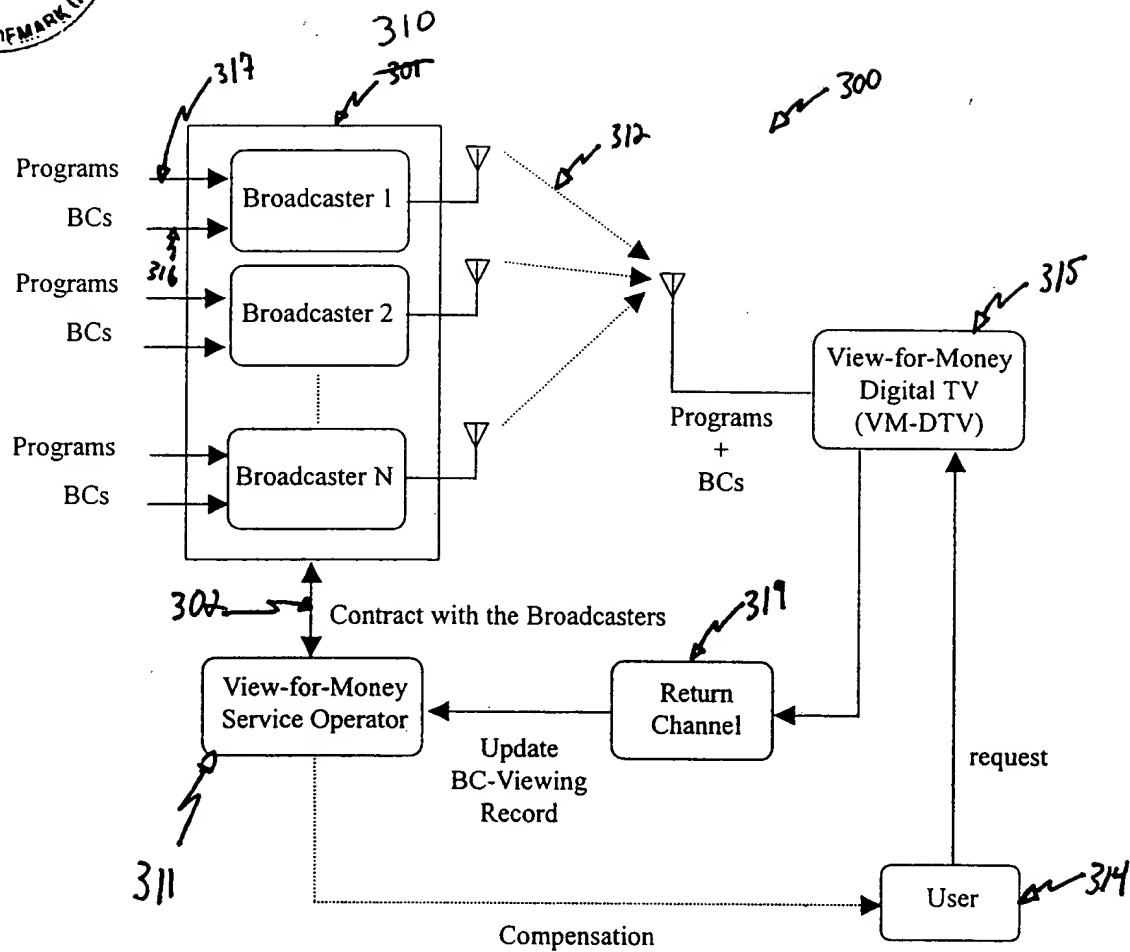
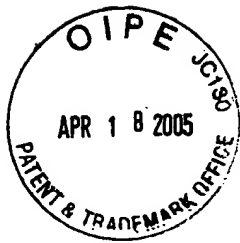


Figure 3



Annotated Sheet

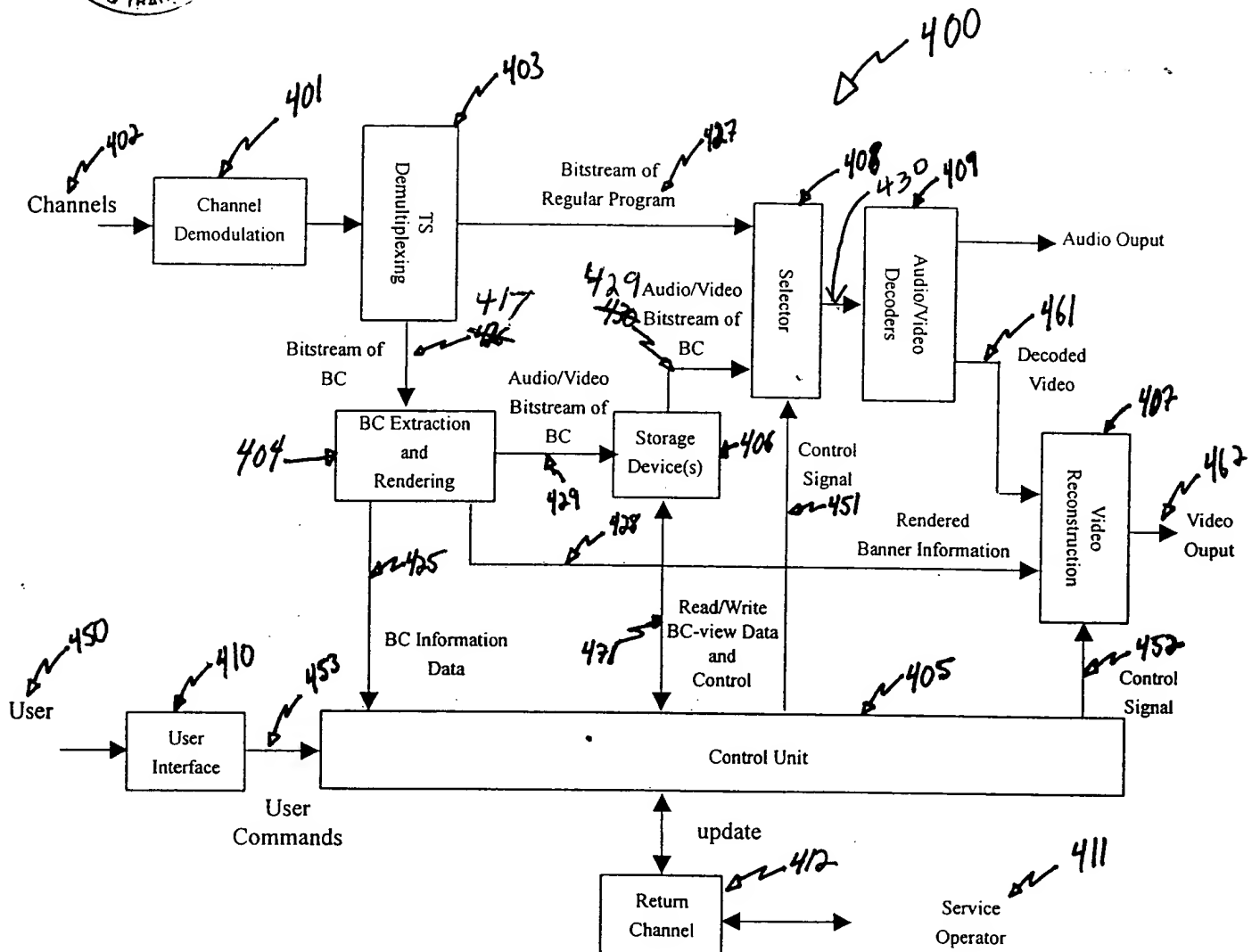


Figure 4



Annotated Sheet

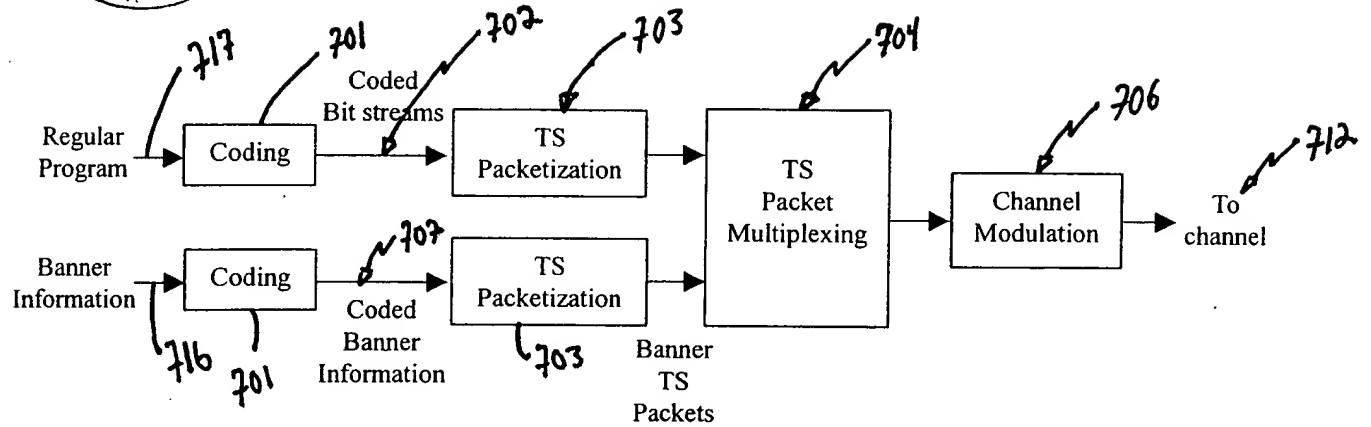


Figure 7

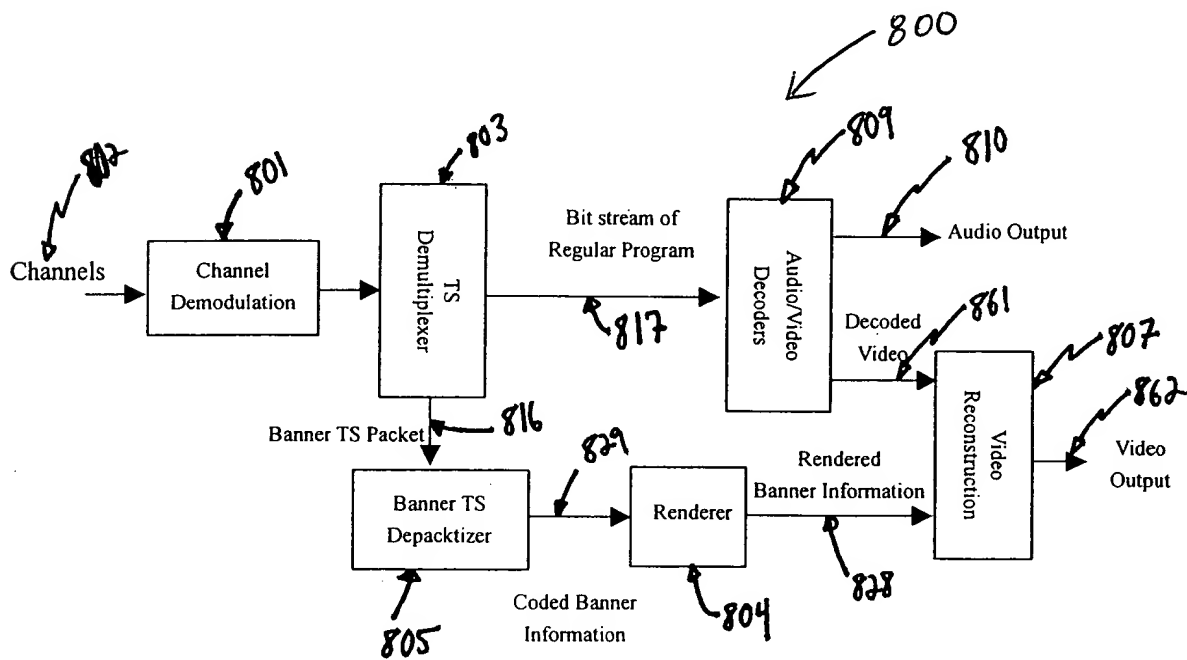


Figure 8